# Sexual risk behavior among military personnel stationed at border-crossing zones in the Dominican Republic

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### **ABSTRACT**

**Objective.** To estimate the prevalence of sexual risk behaviors among military personnel stationed along major border-crossing zones between the Dominican Republic and Haiti. **Methods.** From November 2008 to January 2009, behavioral surveys were administered to

498 active duty military personnel stationed along the three largest border-crossing zones on the western border of the Dominican Republic. Participants were selected using systematic random sampling and asked about their sexual behavior over the past 12 months, alcohol use, and mental health.

**Results.** Forty-one percent reported having casual sex during the past 12 months, 37% of men had a history of having sex with a commercial sex worker (19% during the past 12 months), and 7% of men reported a history of having sex with a transmigrating Haitian (6% during the past 12 months). Among sexually non-monogamous respondents (51%), inconsistent condom use exceeded 60% for those engaging in anal, vaginal, or oral sex. Fifteen percent reported using sexual coercion during the past 12 months.

**Conclusions.** Sexual risk behaviors were prevalent among military personnel stationed along border-crossing zones between the Dominican Republic and Haiti. Prevention programs targeted at military personnel in this region should incorporate sexual coercion and mental health as key elements of their HIV prevention programs.

# Key words

Sexual behavior; military personnel; condoms, utilization; coitus; risk behavior; border health; AIDS; stress disorders, post-traumatic; Haiti; Dominican Republic.

In May 2009, the Dominican Republic's Presidential Council on AIDS, known as Copresida (*El Consejo Presidencial del Sida*), published the results of its first nation-wide survey of risk behavior and human immunodeficiency virus (HIV) and other sexually transmitted infections (STIs) among men who have sex with men

(MSM), commercial sex workers (CSWs), and drug users (1). While military personnel in the Dominican Republic (DR) have anecdotally been considered an at-risk population for STIs and HIV, there has yet to be a study of risk behavior or sero-prevalence among the armed forces.

Despite the highly structured occupational environment in a nation's armed forces, a factor that lends well to sampling, it can be particularly difficult to study sexual risk behavior among military personnel given limitations on researcher access to bases, concerns about security, and sensitivity about data and reporting. When studied, military per-

sonnel worldwide have been documented as frequently engaging in transactional sex and inconsistently using condoms with casual sex partners during peacetime and deployment (2–12). In the DR, anecdotal reports of military personnel engaging in sexual risk behavior on the Haitian border warranted an examination of this specific population.

The Caribbean is the second most HIV-affected region in the world, with roughly three quarters of those living with HIV/AIDS (acquired immune deficiency syndrome) residing in the DR and Haiti (13, 14). The western border of the DR shares five major border-crossing

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# **Report Documentation Page**

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14. ABSTRACT

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zones with Haiti and is patrolled by the Armed Forces of the Dominican Republic (*las Fuerzas Armadas*, FFAA). According to the World Bank's most recent World Development Indicators report, the DR's gross national income (GNI) per capita is more than six times that of Haiti's (15). Haitian transmigrants regularly cross the border for work, market days, laundry, and, in some cases, to engage in transactional sex.

Unique sexual economies often emerge in border-crossing zones, where sexual relationships can be affected by crossnational mobility, market exchange, sexual tourism, culturally sanctioned sex work, and contextualized forms of desire (16, 17). Sexual risk behavior and HIV positivity have been associated with border proximity and border crossing among at-risk populations living near these zones (18, 19). Profiles of risks for HIV and other STIs in these areas have also been found to be unique, suggesting the need to develop interventions specifically tailored for border-crossing zones (17).

High-risk sexual behavior and sexual coercion among military personnel on the border of Haiti and the DR has obvious implications regarding the spread of STIs and HIV in the region. Therefore, the current study team took advantage of a rare opportunity to work with the leadership of the armed forces of the DR to collect sexual risk behavioral data on a systematic random sample of military personnel stationed at three major border-crossing zones along the DR's western border with Haiti.

# **MATERIALS AND METHODS**

# Settings and participants

The study was conducted between November 2008 and January 2009. The Secretary of Defense of the FFAA issued a force-wide approval for the study enabling base access and survey data collection. A systematic random sampling strategy was used to recruit respondents from 12 major bases surrounding the three major border-crossing zones on the western border region of the DR (spanning approximately 163 kilometers of the border zone). A sample size of 415 was required to detect a 4.2% prevalence of unprotected sex with a CSW in the past 12 months (assuming 42% had sex with a CSW and 10% of those had inconsistent condom use) (20) within 0.03 of the unknown estimate and a confidence interval of 95% with adequate power (where 1-beta  $\geq$  0.8).

With the approval of the FFAA Secretary of Defense, which granted permission for the study in 2008, the data collection teams were able to enter military bases, access lists of personnel to conduct sampling procedures, and establish private locations on each base for conducting interviews with FFAA personnel. Due to security issues, a centralized list of personnel could not be obtained. Therefore, respondents were stratified and selected by geographic location and military base. The commander of each base supplied an alphabetized list of all active duty personnel stationed at the base. Every other respondent was systematically selected from each list, and a coin toss was used to determine whether to start sampling from the first or second person on the list. Questionnaires were administered verbally by a team of 14 uniformed FFAA medical personnel who had undergone two days of related training. Respondents were provided a small food allowance for their participation. The questionnaire took approximately 26 minutes to complete. Following completion of sampling at a base, the list of personnel was destroyed.

A total of 499 potential respondents were asked to participate in the study, and 498 consented to the interview and completed the questionnaire. Of those, 496 also answered questions on sexual risk behavior, alcohol abuse, and posttraumatic stress disorder (PTSD). Those surveyed represented 50% of the approximately 998 military personnel eligible to participate in the study at the time of the sampling. Of the 496 in the analytic sample, 472 were male (95%), 18% were married, 53% had not completed secondary school, 72% identified their religion as Roman Catholic, and 100% were born in the DR. The average monthly wage of the study participants was 6594.67 pesos (approximately 188.42 USD), which is lower than the DR's GNI per capita but accurately reflects the level of economic development in the border region. On average, respondents were 31 years old, had 2.2 biological children, had served in the military for 11 years, and had been stationed at their current post for 3.4 years (range 0–391 months). Study participants lived either on base in the barracks, or in the direct vicinity of their deployment. Some

frequently commuted home. Eighty-eight percent served in the army, 8% in the Air Force, and 4% in the Navy. Seventy-nine percent were enlisted.

### **Ethics**

All subjects gave their free and informed consent to participate in the study. The research was conducted in compliance with all applicable U.S. federal regulations for the protection of human subjects in research. The study was approved by the Western Institutional Review Board (WIRB) and a local ethics review panel convened by the Committee of the General Directorate of the Medical Corps and Military Health of the FFAA (*Dirección General del Cuerpo Médico y Sanidad Militar de las FFAA*). All study subjects were members of the FFAA and were ≥ 18 years of age.

### Measures

The questionnaire was similar to a knowledge, attitudes, and practices (KAP) survey and contained items measuring demographic and military characteristics, mental health, alcohol abuse, knowledge of HIV transmission, attitudes, sexual risk behavior, use of sexual coercion, HIV prevention messaging exposure, and STI/HIV health services accessibility. The materials were translated into Spanish by a certified translator and then translated back into English by the study team to validate the accuracy of the original translation.

**Sexual risk behavior.** Sexual risk behaviors were defined and measured according to the prevailing international preventive programming strategies for the uniformed services (21, 22).

A short inventory of potential sexual acts carried out by participants over the past 12 months was developed based on the Risk Behavior Assessment (RBA) Questionnaire (23). Respondents were asked to report the number of times they engaged in oral, vaginal, and anal sex during the previous 12 months. Questions were posed separately for male and female sexual partners. After being questioned about the frequency of specific sexual acts and the gender of their sexual partners, respondents were asked to describe how often they used condoms for/with each sexual act/partner, using a 4-point Likert scale ranging from "never" to "always." Internal consistency reliability for the condom use Likert scaling was low (Chronbach's alpha = 0.62), most likely due to the fact that condom use may vary by sexual activity. This measure of condom use by sexual act was used to classify respondents reporting inconsistent condom use (any frequency other than "always").

In addition to specific sexual activities (anal, oral, and vaginal sex), participants were screened for lifetime and 12-month sex with CSWs and transmigrating Haitians, and 12-month sex with any casual sex partner. These additional measures were included to determine if armed forces personnel were engaging in sex with partners from those specific [high-risk] populations. For each question about the above-mentioned sex partners, respondents were asked whether condoms were used during the last sexual encounter. Respondents were also asked how many people they had had sex with in the past 12 months.

One global measure of sexual risk was defined—sexually non-monogamous behavior in past 12 months—to cover respondents reporting any of the following behaviors: having more than one sexual partner, having sex with a CSW, having sex with a transmigrating Haitian, or having sex with a casual sex partner.

Respondents were also asked whether they had had an abnormal discharge within the past 12 months, and whether they had had a genital ulcer/sore in the past 12 months. The responses from these measures were used to cross-validate the study's measures of sexual risk behavior.

**Use of sexual coercion.** The use of sexual coercion places both the victim and the perpetrator of the abuse at risk for acquiring HIV and other STIs, making it a relevant concept when studying sexual risk behavior among military personnel. Sexual coercion was defined as behavior intended to compel one's partner to engage in unwanted sexual activity (24). A portion of the revised Conflict Tactics Scales (CTS2), also known as the Sexual Coercion Scale (SCS), was used to measure sexual coercion according to this definition (24). The SCS is a seven-item instrument measuring the frequency of three levels of coercion (insistence, threats of force, and actual force) for three types of sexual acts (vaginal, anal, and oral) (24) in the previous year. Respondents were classified as having used sexual coercion in the past year if they screened positive for at least one of the behaviors measured (24).

Mental health. PTSD is an anxiety disorder that arises from exposure to overwhelmingly stressful events and has the following symptoms: re-experiencing, avoidance and numbing, and arousal (25). PTSD was measured using Breslau's 7-item screening scale for PTSD—a short form of the modified National Institute of Mental Health Diagnostic Interview Schedule (DIS) and the World Health Organization (WHO) Composite International Diagnostic Interview (CIDI) (1997), version 2.1 (26). After preparing respondents to recall their most frightening, horrible, or upsetting experience, interviewers provided examples of traumatic events and gave respondents some time to recall traumas that had occurred in their own lives. If respondents recalled a traumatic event, they were asked if they had experienced any of the seven symptoms of PTSD on the Breslau scale during the past month as a result of that event. Respondents who reported experiencing four or more symptoms were classified as having probable PTSD (26).

Alcohol abuse. Alcohol abuse has been associated with sexual risk behavior, particularly among military personnel (10, 12, 27). In the current study, alcohol abuse was measured using the Rapid Alcohol Problems Screen 4–Quantity Frequency (RAPS4-QF). This short screening instrument has previously shown high sensitivity to alcohol abuse, which it defines as a score  $\geq 1$  (28).

# Data analysis

All data were analyzed using Stata Statistical Software, Release 10 (2007) (StataCorp LP, College Station, TX, USA) (29). Logistic regression was used to determine the odds of selected sexual risk behaviors for those with probable alcohol abuse (based on a reference group score of < 1 on the RAPS4-QF) or PTSD (based on a reference group score of < 4 on the Breslau 7-item screen). Analyses were adjusted for the potential effects of education, gender, and age. Various sexual risk behavioral outcomes were examined and the data were tested for twoway interaction effects between probable alcohol abuse and PTSD.

## RESULTS

High-risk sexual behaviors were cross-validated with reports of abnormal discharge and/or a genital ulcer (6.3%) over the past year. Personnel who reported having sex with a CSW during the past 12 months were 2.7 times more likely to have an ulcer and/or discharge (95% CI 1.2-5.8, P = 0.01), and those reporting sexually non-monogamous behavior were 2.5 times more likely to have an ulcer and/or discharge (95% CI 1.1-5.5, P = 0.02). Personnel reporting sexual coercion were 2.9 times more likely to have an ulcer and/or discharge (95% CI 1.3–6.5, P < 0.01). Nineteen percent of men reported that they were circumcised.

On average, respondents reported 1.8 sexual partners during the past 12 months. Table 1 shows the number and percentage of survey respondents reporting various sexual risk behaviors over the same period. Among those reporting sex with a casual sex partner (40.7%), 10.7% said they did not use protection during last sexual contact. Thirtyseven percent of men engaged in sex with a CSW during their lifetime, and among the 19.2% who had sex with a CSW during the past 12 months, 13.6% did not use protection during last sexual contact. Seven percent of men engaged in sex with a transmigrating Haitian during their lifetime, and among the 6.1% who had done so during the past 12 months, 3.4% did not use protection during last sexual contact.

Fifty-one percent of respondents were sexually non-monogamous during the past 12 months. Among the non-monogamous respondents, 4% engaged in anal sex, of which 65.0% reported inconsistent condom use; 42.3% engaged in vaginal sex, of which 68.6% reported inconsistent condom use; and 35.3% engaged in oral sex, of which 85.1% reported inconsistent condom use. Among respondents who reported more than one sexual partner during the past 12 months (36.8%), 85.1% reported inconsistent condom use during anal, vaginal, or oral sexual activity.

Fifteen percent of respondents reported using sexual coercion during the past 12 months. The most common sexually coercive behavior was insisting on sex without using physical force when a partner did not want to (10.7%), followed by insisting on oral or anal sex

TABLE 1. Number and percentage of respondents reporting past 12-month sexual risk behavior in surveys of military personnel stationed at border crossing zones, Dominican Republic, November 2008–January 2009

Behavior	No.	%
Sex with casual sex partner ( <i>n</i> = 487)	198	40.7
Unprotected at last sexual contact	21	10.7
Sex with commercial sex worker (men only) $(n = 458)$	88	19.2
Unprotected at last sexual contact	12	13.6
Sex with Haitian transmigrant (men only) ( $n = 472$ )	29	6.1
Unprotected at last sexual contact	1	3.4
Non-monogamous and sexually active ( $n = 496$ )	252	50.8
Engaged in anal sex	20	4.0
Inconsistent condom use <sup>a</sup>	13	65.0
Non-monogamous engaged in vaginal sex ( $n = 496$ )	210	42.3
Inconsistent condom use	144	68.6
Non-monogamous engaged in oral sex ( $n = 496$ )	175	35.3
Inconsistent condom use	149	85.1
More than one sexual partner ( $n = 492$ )	181	36.8
Inconsistent condom use	154	85.1
Used sexual coercion $(n = 496)$	75	15.1
Inconsistent condom use	67	89.3

<sup>&</sup>lt;sup>a</sup> Ever having unprotected oral, anal, or vaginal sex in past 12 months.

(7.1%) and making a partner have sex without a condom (2.2%).

The probability of engaging in sex with high-risk partners, sex with multiple partners, and inconsistent condom use was generally elevated for respondents with probable alcohol abuse or probable PTSD (Table 2). For example, the odds of sex with a CSW were 4.0 times higher among those with probable alcohol abuse (95% CI 1.7-9.7, P < 0.01) compared to those without probable alcohol abuse, and 2.8 times higher among those with probable PTSD (95% CI 1.6-4.8, P < 0.01) compared to those without probable PTSD. The odds of

being sexually non-monogamous with inconsistent condom use were 2.6 times higher among those with probable alcohol abuse (95% CI 1.6–4.3, P < 0.01), and 2.7 times higher among those with probable PTSD (95% CI 1.7–4.5, P < 0.01). The odds of using sexual coercion were 2.8 times higher among those with probable alcohol abuse (95% CI 1.2–6.5, P < 0.05), and 4.2 times higher among those with probable PTSD (95% CI 2.4–7.2, P < 0.01).

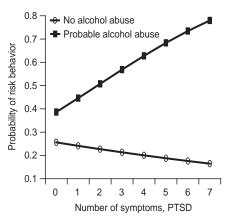
Alcohol abuse and PTSD showed an interaction effect for having sex with a casual sex partner, having more than one sexual partner, and being sexually non-

TABLE 2. Odds ratios for past 12-month sexual risk behaviors among military personnel at border crossing zones with probable alcohol abuse and post-traumatic stress disorder (PTSD), Dominican Republic, November 2008–January 2009

	Probable alcohol abuse <sup>a</sup>	Probable PTSD <sup>b</sup>
Sexual risk behavior	Adjusted odds ratio (95% $CI^c$ ) <sup>d</sup> ( $n = 469$ )	
Sex with casual sex partner Sex with commercial sex worker <sup>f</sup>	2.1 (1.2–3.4) <sup>e</sup> 4.0 (1.7–9.7) <sup>e</sup>	2.7 (1.7–4.4) <sup>e</sup> 2.8 (1.6–4.8) <sup>e</sup>
Sex with Haitian transmigrant <sup>f</sup> ≥ 1 sexual partner Sexually non-monogamous	7.3 (0.97–55.3) 4.1 (2.3–7.5) <sup>e</sup> 2.7 (1.7–4.3) <sup>e</sup>	2.0 (0.8–4.8) 2.5 (1.5–4.1) <sup>e</sup> 2.9 (1.7–4.9) <sup>e</sup>
Sexually non-monogamous with inconsistent condom use Used sexual coercion	2.6 (1.6–4.3) <sup>e</sup> 2.8 (1.2–6.5) <sup>g</sup>	2.7 (1.7–4.5) <sup>e</sup> 4.2 (2.4–7.2) <sup>e</sup>

<sup>&</sup>lt;sup>a</sup>Rapid Alcohol Problems Screen 4 –Quantity Frequency (RAPS4-QF) score ≥ 1 (versus reference group score of < 1).

FIGURE 1. Effect of probable alcohol abuse<sup>a</sup> and number of PTSD symptoms<sup>b</sup> on odds of past 12-month risk behavior<sup>c</sup> among military personnel stationed at border crossing zones, Dominican Republic, November 2008–January 2009<sup>d</sup>



<sup>&</sup>lt;sup>a</sup> Rapid Alcohol Problems Screen 4 –Quantity Frequency (RAPS4-QF) score ≥ 1 (versus reference group score of < 1).

monogamous with inconsistent condom use. In each case, the subgroup with both probable alcohol abuse and probable PTSD showed the highest probability of sexual risk behavior. As shown in Figure 1, the probability of sexually nonmonogamous behavior with inconsistent condom use increased with the number of symptoms of PTSD (range 0–7) among those with probable alcohol abuse relative to those without alcohol abuse.

# **DISCUSSION**

Results from this study suggest that FFAA personnel stationed at major border-crossing zones between the DR and Haiti are at risk for HIV and other STIs. Multiple and/or risky sexual partners, inconsistent condom use within the context of sexually non-monogamous relationships, and the use of sexual coercion may increase the risk of HIV and other STIs among this population and other similar populations.

The prevalence of sex with CSWs observed in this study has been reported among militaries worldwide (2–4, 7–12, 20, 30, 31). Brodine et al. (2003) found that the odds of HIV-1 non-subtype B infection were 4.9 times higher among

<sup>&</sup>lt;sup>b</sup>Breslau's 7-item screen score ≥ 4 (versus reference group score of < 4).

<sup>&</sup>lt;sup>c</sup>CI: confidence interval.

<sup>&</sup>lt;sup>d</sup>Estimates derived from logistic regression, controlling for age, education, gender, alcohol abuse, and PTSD.

eP < 0.01.

f Among men only.

 $<sup>^{9}</sup>P < 0.05$ 

b Post-traumatic stress disorder indicators, based on Breslau's 7-item screening scale.

<sup>&</sup>lt;sup>c</sup> Non-monogamous sexual activity with inconsistent condom use.

<sup>&</sup>lt;sup>d</sup> Based on logistic regression and controlling for age, education, and gender.

U.S. military personnel who reported contact with a CSW (41%) (10). A separate study of Salvadoran military personnel found that 60% of HIV-positive personnel reported unprotected sex with a CSW prior to their HIV diagnoses (31). The overall rate of sexually nonmonogamous behavior with inconsistent condom use (44%) suggests that FFAA personnel stationed at border-crossing zones may be bridging sexual networks with the local community, thus placing themselves and their sexual partners at risk for HIV and other STIs.

The prevalence of sexual coercion (15%) and sex with transmigrating Haitians (6%) reported for the 12-month period indicates that these risk behaviors are not being addressed in current efforts to prevent HIV and other STIs among the uniformed services. In the current study, personnel reporting sexual coercion were nearly three times more likely to report abnormal discharge and/or a genital ulcer/sore. Therefore, addressing the topic of sexual coercion within the context of military sexual health seems warranted, particularly in the population of FFAA personnel patrolling border-crossing zones. Few studies have documented the perpetration of sexual coercion in military personnel (32–34). One study that used the CTS2 to measure sexual coercion found a 40% prevalence of preceding-year sexual aggression in veterans in a trauma recovery clinic (34). Among personnel in the current study with PTSD, the prevalence of sexual coercion was 33.3%. Indeed, mental health and sexual coercion should be addressed in prevention of HIV and other STIs among uniformed personnel. While cultural conceptions of the full spectrum of sexual coercion vary, HIV prevention activities may be a domain in which sexual coercion can be proactively addressed. Behavioral interventions for the uniformed services in the Caribbean region should focus on issues such as power, norms, and sexual negotiation in prevention efforts, and the resulting messages must be supported by military leadership and disseminated through the chain of command. The FFAA is currently working with nongovernmental organizations (NGOs) in exploring programs and interventions to address sexual coercion within the context of prevention programming for HIV and other STIs.

The results revealed that probable PTSD and alcohol abuse were associated with a myriad of sexual risk behaviors, and a post-hoc power analysis of sexually non-monogamous behavior with inconsistent condom use confirmed that the estimated power exceeds 0.9 for twosample comparison of proportions between those with probable PTSD and probable alcohol abuse compared to other subgroups. Sexual risk behavior and alcohol abuse have been linked in previous studies of military personnel (10, 12, 27). One qualitative focus group study of Northern Thai military conscripts found that alcohol consumption was used to decrease inhibitions associated with interacting with women as well as sexual risk-taking behavior, and to provide a socially acceptable excuse for not using condoms as well as a means to increase male sexual pleasure (27). It is likely that similar mechanisms underlie the documented association in the current study. Therefore, activities for armed forces personnel that aim to build confidence and promote an ability to make predetermined choices regarding one's engagement in healthy sexual behavior should be considered for future public health interventions.

The link between PTSD and sexual risk behavior in the current study was persistent and troubling, particularly because 1) 19% of the sample screened positive for probable PTSD, and 2) it remains challenging to adequately address PTSD within sexual risk prevention programs for military personnel. PTSD has also been associated with sexual risk behaviors in nonmilitary populations (35–39), which present their own challenges, distinct from military personnel. Given the broad effects of PTSD on sexual behavior, a variety of mechanisms may underlie this association, including the disorder's undermining of the normal effects of psychosocial factors protective against sexual risk-taking (e.g., risk perception, self-efficacy, condom use intention, and relational dispositions toward current and future sexual partners). Separate analyses of the current data revealed that 1) PTSD remained associated with several sexual risk behaviors even after controlling for psychosocial correlates of risk behavior identified in a separate study (40), and 2) the interaction effects that were found between probable PTSD and alcohol abuse were associated with sexually non-monogamous behaviors. This association may depend on PTSD severity. For example, a post-hoc analysis of the interaction effect between 1) probable alcohol abuse and 2) number of PTSD symptoms on sexually non-monogamous behavior with inconsistent condom use indicated the probability of the risk behavior was positively correlated with an increase in the latter variable among those scoring positively for the first variable.

As PTSD and alcohol abuse are prevalent among military personnel, understanding the complex associations between these disorders and sexual behavior may help clarify the specific nature of the transmission of HIV and other STIs in the uniformed services. PTSD is often comorbid with other substance use disorders as well (41). Additional research in this area should aim to elucidate mechanisms to address these complex factors in prevention programming for HIV and other STIs.

### Limitations

This study had several limitations. First, due to the population studied, the findings may only be generalized to DR military personnel stationed along the specified border-crossing zones between Haiti and the DR. Second, uniformed data gatherers were used to verbally collect respondents' information, a technique that has proven sensitive to the effects of interviewer gender (42) and thus may result in reporting bias (43). Third, the study relied on respondent selfreporting of behaviors and symptoms, which may have introduced recall bias. Fourth, while the study documented a strong association between probable PTSD and sexual risk behaviors, it did not document the types of traumatic exposure that were reported, or the timing of the symptoms relative to the risk behavior. Fifth, the study did not screen for the abuse of substances other than alcohol. Finally, respondents were not tested for HIV or other STIs and were not asked about their serologic status.

## Conclusion

This study found that military personnel stationed along major border-crossing zones between the DR and Haiti expose themselves to risk of HIV infection through high-risk sexual activity with members of the local community.

Probable alcohol abuse and PTSD were associated with many of these behaviors. These findings are timely, particularly given the current humanitarian crisis in Haiti. These data can be used to help inform the development of HIV prevention programming strategies and interventions in the region.

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### **RESUMEN**

Comportamiento sexual riesgoso del personal militar en zonas de paso fronterizo de la República Dominicana *Objetivo.* Calcular la prevalencia del comportamiento sexual riesgoso del personal militar que sirve en las principales zonas de paso fronterizo entre la República Dominicana y Haití.

*Métodos.* De noviembre del 2008 a enero del 2009, se aplicaron encuestas sobre comportamiento a 498 miembros del personal militar que estaba en servicio activo en las tres zonas principales de paso fronterizo de la frontera occidental de la República Dominicana. Se seleccionó una muestra aleatoria y sistemática de participantes, a los que se les formularon preguntas sobre su comportamiento sexual de los últimos 12 meses, el consumo de bebidas alcohólicas y la salud mental.

Resultados. De todos los entrevistados, 41% revelaron que habían mantenido relaciones sexuales casuales en los últimos 12 meses, 37% de los hombres alguna vez habían mantenido relaciones sexuales con un profesional del sexo (19% en los últimos 12 meses) y 7% de los hombres informaron que habían tenido relaciones sexuales con personas de Haití que cruzaron la frontera (6% en los últimos 12 meses). De los entrevistados no monógamos (51%), más de 60% de los que mantuvieran relaciones por vía anal, vaginal u oral no fueron constantes en el uso de preservativos. Refirieron el uso de coacción sexual en los últimos 12 meses 15% de los entrevistados.

*Conclusiones.* El comportamiento sexual riesgoso es prevalente entre los miembros del personal militar que sirve en las zonas de paso fronterizo entre República Dominicana y Haití. Los programas de prevención contra la transmisión del VIH destinados al personal militar de esta región deben incorporar como temas esenciales la coacción sexual y la salud mental.

# Palabras clave

Conducta sexual; personal militar; condones, utilización; coito; conducta de riesgo; salud fronteriza; síndrome de inmunodeficiencia adquirida; trastornos por estrés postraumático; Haití; República Dominicana.